



As stated above, the Pit River Tribe (Ahjumawi-Atsugei Nation) is part of the Native Coalition for Medicine Lake Highlands Defense and consists of eleven autonomous bands which are located in parts of Shasta, Siskiyou, Modoc and Lassen Counties. The Tribe's ancestral territory includes the Medicine Lake Highlands, an area that has served as a traditional haven to Native American People and has been used as spiritual, ceremonial, healing, plant gathering and obsidian quarry grounds for thousands of years. The Medicine Lake Highlands area continues to be used for these cultural and religious purposes by the Ahjumawi and Atwamsini Bands of the Tribe and is highly significant to the cultural continuity of these Bands and to the Pit River Tribe as a whole. The Pit River Tribe and its individual members derive spiritual, cultural, religious, health, environmental and aesthetic benefits from Medicine Lake and the Medicine Lake Highlands.

The Medicine Lake Highlands lie at the intersection of the Modoc, Klamath, and Shasta-Trinity National Forests in a remote and undeveloped corner of northeastern California. They encompass California's most diverse volcanic fields on the continent's largest shield volcano. The volcano's caldera, a 500-foot-deep oval crater about six miles long and four miles wide, was formed when underground magma flows collapsed the dome's summit in Pleistocene times. Later eruptions built a ring of smaller volcanoes around the rim of the basin. Later eruptions built a ring of smaller volcanoes around the rim of the basin. The azure waters of Medicine Lake lie embedded in this million-year sculpture of volcanic fury, with its striking variety of textures - lava flows, clear lakes, mountains of glass-like obsidian, slopes of white pumice, dark boulders, and silver-green mountain hemlock.

The Highlands' clear skies are home to eagles, goshawks, and rare bats. Tall forests shelter martens, fishers, and unknown numbers of sensitive plants. Filtered through porous rock, the Highlands' aquifer feeds California's largest spring system, which flows into the Sacramento River by way of the Fall and Pit Rivers.

For ten thousand years by the archaeologist's count, as far back as memory and signs hewn in stone can reach, the Medicine Lake Highlands have been a place of traditional spiritual practice. To Native American tribes known as the Ahjumawi (Pit River), Modoc and Shasta—as well as to more distant tribes—the landscape is a living scripture in which higher beings have left messages for the first people of the land. Today, the people continue their prayer, vision questing, healing, and subsistence practices in the Highlands.

In this remote area there are no freeways, no trains, no factories, no power lines, no bright lights. Narrow winding roads take you to Glass Mountain, Pumice Craters Lava Flow, Yellow Jacket Ice Cave, Red Shale Mountain, Burnt Lava Flow, Paint Pot Crater, Medicine Mountain... Absent is the grinding roar of engines to which we have become accustomed.

The Native Coalition for Medicine Lake Highlands Defense alleges that the Siskiyou County Air Pollution Control District ("Air District") approved permits for the construction and operation of a major geothermal power plant on sacred lands long used by neighboring Native American tribes. By approving the destruction of environmental and cultural values in the Medicine Lake Highlands, the Air District has

discriminated against Native American culture on the basis of race, color, and national origin, placing an exceptional burden on the practice of Native American culture and religion. The Air District has therefore violated Title VI of the Civil Rights Act of 1964 and the Environmental Protection Agency's ("EPA") implementing regulation, 40 C.F.R. § 7.35. The Air District is a recipient of EPA financial assistance pursuant to 40 C.F.R. § 7.25.

## SECTION I: INTRODUCTION

Calpine Corporation proposes to develop the Telephone Flat Geothermal Development Project in the heart of the Medicine Lake Highlands in close proximity to Medicine Lake in Siskiyou County, California.

On March 26, 2003<sup>1</sup>, the Air District Hearing Board issued Statement of Decision No. 03-03 denying the Appeal of the Native Coalition for Medicine Lake Highlands Defense and the Pit River Tribe and Upholding the Air District's approval of the Authority to Construct ("ATC") for the Telephone Flat Geothermal Development Project ("the Project") power plant permit issued to Calpine. The ATC describes the Project as a "geothermal power generating facility including a 48 megawatt gross (MW) geothermal power plant, geothermal fluid transmission system, and related facilities required to generate electricity from geothermal fluids for commercial transmission."<sup>2</sup>

Initially, the Project estimates 10 to 12 production wells and 3 to 5 injection wells. Further, there would be additional development wells, injection wells, and make up wells for the life of the project (45 years with an option to renew).<sup>3</sup> Each production well would require 25 to 90 days of round the clock drilling down 9,000 to 10,000 feet, followed by an additional 30 days of flow testing. Miles of aboveground, 3 foot

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<sup>1</sup> A request was made to Siskiyou Air Pollution Control District for the final Notice of Determination as provided for in No. 3 of the Siskiyou County Air Pollution Control District Hearing Board Statement of Decision 03-03 signed March 26, 2003. As of this date, however, we have not received a Final Notice of Determination from Siskiyou County on the final ATC permit. Please see attached copy of Statement of Decision 03-03. As described later in this Complaint, we were able to obtain a copy from the State Clearinghouse and learned that the Final Notice of Determination for Statement of Decision 03-03 was received on April 1, 2003 by the State Clearinghouse (please see Section II: Ripeness, below).

<sup>2</sup> Siskiyou County Air Pollution Control District *Authority to Construct*, ATC No. G.P.P.2. A copy of the permit that was sent to us did not contain Calpine Corporation's signature. We have requested a copy of the ATC permit containing the signature of the owner-operator but have not received it.

<sup>3</sup> This number is only an estimate dependent "...on the drilling, testing, and response of the geothermal reservoir." [Telephone Flat Executive Summary at page ES-9. As such, Calpine plans to inject tens of thousands of gallons of the hazardous hydrochloric acid and ammonium fluoride [to produce hydrofluoric acid] into geothermal wells because of the low permeability of the geothermal system and the lack of an economically sustainable and commercially viable resource. This Enhanced Geothermal System [EGS] testing was described in Calpine's solicitation for funding from the Department of Energy.

diameter high-pressure pipelines would carry the 400-degree Fahrenheit steam to the power plant. The ninety feet tall power plant would be the tallest building in rural Siskiyou County, in the midst of the Modoc and Klamath national forests. Each well pad site would include solid and fluid disposal sumps. Steam plumes would release large quantities of moisture containing traces of brine contaminants. In the bowl-

A new 13-mile high voltage transmission line would be constructed through the Medicine Lake Highlands to interconnect with the 24-mile transmission line proposed for the Fourmile Hill Geothermal Development Project. According to the Environmental Impact Report for the Project (EIR), bald eagles could die colliding with transmission lines, and the development would disrupt habitat for endangered and sensitive species including bats, goshawks, and pine martens as a 1000-foot swath is cut through the Traditional Cultural District and a Managed Late Successional Area (old growth) and impacting three highly significant sites within the Traditional Cultural District—Glass Mountain, Red Shale Butte, and Lyon's Peak before it connected with the Fourmile Hill Utility.

On April 1, 2003, the California State Clearing House ("SCH") received the Final Notice of Determination from the Siskiyou County Air Pollution Control District for the Telephone Flat Geothermal Development Power Generating Facilities, SCH No. 1997052078. We never received this Final Notice of Determination from Siskiyou County. However, a copy from the SCH Internet link is here included. Thus this complaint is timely filed under 40 C.F.R. § 7.120 (b) (2). The 180 days filing deadline would begin from the issuance of that Notice of Determination.

The Air District receives financial assistance from the EPA and is prohibited by Title VI of the Civil Rights Act of 1964 and the EPA's Title VI implementing regulations from permitting projects that have the intention and/or effect of discriminating against racial minorities.



Notification of the approval of the ATC is the action that initiates this Title VI Complaint, because this approval *permits and implements* the biased and discriminatory conclusions found in the certification of the EIR, Statement of Decision 03-01 and Resolution 03-02. By issuing the construction permit, which contains provisions for changing the status to a "Permit to Operate", the Air District has approved the destruction of lands sacred to nearby Native American communities and thus severely restricted the ability of Tribes, including the Pit River Tribe, to practice ancient spiritual and cultural traditions. Statement of Decision 03-03 pertains to the action of physically desecrating this spiritual area by building a power plant, together with all the impacts of this development affecting a large area within the heart of the Medicine Lake Caldera Traditional Cultural District.

### SECTION III: STATEMENT OF FACTS

This complaint challenges the Air District's approval of construction and operation permits for the Telephone Flat Geothermal Development Project proposed by Calpine Corporation. This project is one of two projects currently approved and proposed for development in the Medicine Lake Highlands surrounding Medicine Lake in Siskiyou County, California. The other project, the Fourmile Hill Geothermal Development Project was approved in a Record of Decision dated May 31, 2000.

The Keeper of the National Register of Historic Places designated the Medicine Lake Caldera as a Traditional Cultural District in July 1999. The Telephone Flat Geothermal Development Project is located in the heart of the Traditional Cultural District. Additional areas in the Medicine Lake Highlands – Cougar Butte, Indian Butte and Timber Mountain Archeological District were also found eligible for the National Register.<sup>6</sup>

However, the 1999 Determination of National Register Eligibility does not complete the historic resources identification and evaluation steps. In issuing the National Register Eligibility Notification, the Keeper's Determination of Eligibility warned that the "proposed boundaries [of eligible resources that meet the criteria for listing in the National Register] may not contain the full extent of potential eligible areas significant for their association with traditional cultural practices and beliefs." To remedy this problem, the Keeper strongly recommended that the Forest Service should consider completing additional consultation with traditional experts and interested Native American groups in an effort to identify and document additional resources or properties that may be potentially eligible for inclusion" in the National Register of Historic Places.

Therefore, in approving the ATC that includes a transmission line in an area that has not been adequately evaluated for the National Register of Historic Places, the Air District imposed a disparate risk to Native American traditional cultural values and practices.

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<sup>6</sup> Determination of Eligibility Notification, United States Department of the Interior, July 16, 1999.

Members of local tribes stress that these traditional practices will survive only if the natural integrity and cultural landscape of the Highlands remain intact. Underlying the importance of preservation is the belief among Tribal members that each element of the Highlands ecosystem is linked to other elements by a complex set of physical and spiritual interactions. Damage to any one of these elements -- the air, water, soil, animals, or vegetation -- will impact the Highlands' physical and spiritual equilibrium in a way that will compromise both the sacredness of the land and the practices that take place on that land.

The logistics of these ancient practices also necessitate the preservation of the Highlands. Traditional rites, such as spirit quests, require an individual to travel from one place to another, create stone piles to mark prayer sites, visit bathing areas for

spiritual cleansing, gather food and medicines from particular areas, and seek isolation in places far from human contact for days at a time. The Tribes emphasize that these traditional practices rely on spiritual solitude and sensory deprivation, which is impossible when elements are introduced that are strikingly out of character with the natural landscape.

The Tribes also stress that these traditions are inextricably rooted to the land of the Medicine Lake Highlands. Traditional practices cannot simply be relocated to unfamiliar territories because the practices themselves have evolved over centuries in harmony with the unique character of the Highlands. Moreover, the development of these lands on the scale proposed by Calpine irreversibly destroys the physical integrity and spiritual value of the Highlands. The preservation of the Highlands is integral to the survival of local Native American cultures.

The Bureau of Land Management's (BLM) designation in the mid-1970s of the Medicine Lake Highlands as the Glass Mountain Known Geothermal Resource Area was made despite the importance of preserving both the physical environment and the cultural value associated with the Medicine Lake. Since then, Calpine has purchased leases from BLM to develop Geothermal Power projects in the Highlands area.

On May 31, 2000 the BLM and the USFS [the Agencies] jointly issued a Record of Decision denying the Telephone Flat Geothermal Development Project on several grounds, including that the current and expected traditional uses and values associated with the setting of the Medicine Lake Caldera area exceeded the values obtained by developing the geothermal power plant at Telephone Flat. In October 2000 the then-project proponent, CalEnergy, filed a lawsuit against the Agencies in the U.S. Court of Federal Claims for the denial of the Telephone Flat Geothermal Development Project alleging breach of contract and takings claim. In November 2001 Calpine acquired the interests of CalEnergy in the Telephone Flat Development Project. In April 2002 the U.S. Department of Justice announced a settlement of litigation over the Telephone Flat Development Project under which the federal agencies agreed to reconsider the denial of the project and determine whether to issue a new ROD by November 2002. In that same month, Calpine requested the Siskiyou County Air District to certify the Environmental Impact Report [EIR] pursuant to the California Environmental Quality

Act [CEQA] and re-submitted the Authority to Construct application for the Project. In November 2002 a Notice of Availability of an Update Assessment for the Telephone Flat Geothermal Development Project was issued by the Air District concluding that "there is no significant new information that has arisen since the EIR was released [in 1999] and recirculation of the EIR is not required..." On November 26, 2002, the Agencies jointly issued a new record of decision, reversing the earlier record of decision denying the project and this time approving Calpine's Project at Telephone Flat with a transmission line alternative as described above [segment D-2 and B-2]. The Air District approved the Project on February 14, 2003 and the Board of Supervisors denied a subsequent Appeal of the EIR on March 25, 2003.

A total of approximately 66 square miles have been leased to Calpine Corporation in the Medicine Lake Highlands. The entire area available to be leased to geothermal development is 134,000 acres. Thus, the Telephone Flat and the Fourmile Projects are only a "foot in the door" for potentially much more extensive developments.

#### SECTION IV: DISPARATE ENVIRONMENTAL IMPACTS

Construction and operation of the Telephone Flat Development Project would have the effect of discriminating against Native Americans. The Project would destroy the physical integrity of the Highlands, which has spiritual significance to Native Americans living near the Highlands. The Project would also impede the ability of Native Americans to carry out the cultural and spiritual practices that have evolved over thousands of years in harmony with the Highlands. The Environmental Impact Report for the Telephone Flat Development Project anticipates that the Project would create air, visual, and noise pollution, and that the plant and its accompanying facilities would have a disruptive physical presence. Indeed, the Air District stated that "The local tribes consider the construction of the proposed Project (including the transmission line) in the Medicine Lake Highlands to have a significant, adverse impact on the spiritual and religious significance of the region. The impact of construction is considered significant and unavoidable because the Project would introduce visual and audible elements that would alter the setting in the vicinity of the proposed Project." [See Findings of Fact and Statement of Overriding Consideration for the Telephone Flat Development Project, Impact 3.6.3.6.2-4 at page 79]

The Air District determined that overriding considerations supported approval of the Project despite these significant unavoidable impacts on Native American cultural uses even after mitigation. The overriding considerations included questionable economic and social benefits that were deemed more important than the preservation of Native American culture. No cost-benefit analysis was done that would have included the tangible and intangible costs to Native Americans. The Air District's social and economic study failed to consider impacts on Native American cultural values and was consequently biased.



Part A of this Complaint briefly describes the Project's anticipated environmental impacts. Part B describes the ways in which Native American communities in the Medicine Lake Highlands would be affected by the Project.

**A. The environmental impact of the Telephone Flat Project is serious and has been ignored in the Air District's decision**

The Telephone Flat EIR states that the "development of subsurface geothermal waters may adversely affect the spiritual qualities of Medicine Lake or sacred springs, and this impact was determined to be significant and no mitigation measures are feasible. EIR ES-27. The Project would substantially alter the physical character of the Highlands and result in noise and air pollution, "Project facilities and cooling tower condensate plumes could be seen and some Project operations could be heard from locations used by Native Americans for vision quests--...but the [mitigation] measure would not reduce the adverse effects of the impact to below the level of significance;" and "Continued development of any kind in the Medicine Lake Highlands, including the proposed Project, would adversely affect the spiritual significance of the Medicine Lake Highlands as a whole sacred site, and this impact was determined to be significant and no mitigation measures are feasible;" EIR at page ES-27.

**Visual Impacts**

The Project's location would be in the heart of the Traditional Cultural District determined in July 1999 to be eligible to the National Register of Historic Places. The Project would be located in an environmentally sensitive area that contains or is close to the major water resources of the Medicine Lake Highlands. Both the Project's location and its effects on the total viewshed, and the associated water resources, are of essential significance to Native American traditional uses of the area. The Project would be prominently visible from high sites within the Traditional Cultural District that are integrally associated with traditional uses and which require a natural setting. It is therefore a place where visual quality impairment would be particularly devastating. Please see the enclosed graphic depiction of the Project location.

The visual impact caused by dozens of well pads, million-gallon toxic sump ponds at each well pad, steam plumes, new roads, 1000-foot-wide transmission line corridors, 90-foot high cooling towers and power plant facilities, 24-hour lighting in an area where there are presently no power lines, all would be drastically out of character with the natural appearance of the area on which cultural values depend. The same would be true for fuel deliveries, transportation of chemicals, increased traffic, dust suppression, and other industrial activities. The proposed transmission line corridor would disturb old growth red fir and pine that contribute to the viewshed of cultural areas, and unacceptably fragment vegetation and wildlife habitat. The injection of hazardous materials like hydrochloric acid and ammonium fluoride into geothermal wells in order to fracture the geothermal reservoir threaten the quintessential purity of the sacred waters. The visual impact caused by the pumping equipment, pipelines, and refurbished wells in Arnica Sink within the Traditional Cultural District would be drastically out of character with the natural appearance of the area on which cultural values depend.

Impacts to the entire Caldera are not addressed. The Telephone Flat EIR [page 3.4-27] modeling calculated a *median* steam plume dimension of *less than* 250 feet in length with a height of only 135 feet compared to a length of 930 feet described in the Fourmile EIR. (EIR 4-138 to 4-139). Such plumes would be apparent throughout the Highlands and beyond, a constant reminder of the industrial intrusion into the area's natural beauty. Cultural people who know the land say that in varying degrees the plumes and the unaccustomed glow of the 24 hour lighting would be visible from many specific traditional sites -- Medicine Lake, Little Medicine Lake, Mount Hoffman, Little Mount Hoffman, Medicine Mountain, Glass Mountain, Red Shale Butte, Lyon's Peak, among others. During operations, the 140 foot lighted drilling rigs, which would operate 24 hours a day when drilling in-fill wells, would be visible throughout the life of the project. In addition, the transmission lines would be visible from all high points within the Traditional Cultural District and beyond.

The Project would be built only one-quarter mile from Medicine Lake itself and would violate the Visual Quality Objective of "Retention" that prevails within the transmission line corridor B2 and "Partial Retention" for the power plant and associated industrial structures and operations under the Modoc National Forest Land and Resource Management Plan.

The Air District approved the ATC over the objections of Native Americans, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the public in spite of the knowledge that implementation of this industrial operation in a forested area would constitute a significant impact to areas with exceptional visual qualities. This decision is biased and unjustified.

The 1984 Environmental Assessment of the Project ("84 EA") stated that:

Any plant or well within the foreground zones of key recreationally traveled roads, recreation sites or within concentrated recreation use zones would be visually incompatible with the surrounding landscapes. The facility would dominate the view and would not be compatible with the surrounding natural setting. The closeness and magnitude, plus the high structural complexity of the facility, will preclude the opportunity to draw from natural characteristics in terms of form, line, color or texture. The plant will appear as an industrial complex out of context with the surroundings. Its overpowering impact would negate any beneficial views of background zones. Visual quality objectives would not be met. Screening efforts and mitigations will not be effective. It may also not be possible for powerlines to meet established visual quality objectives, depending on the location, size of lines, and corridors. (84 EA at 37)

Based on this definition, the location of power plant itself in the vicinity of routes used by Native Americans and the general public, as well as within visibility from traditionally used high places, would violate the stipulation, especially when applied to Native American values.

The 1984 EA also finds that the visual quality of "middleground and background" views could also fail to meet visual quality objectives. (*Id.*) The 84 EA notes that "[a]ny landscape altering activities have the potential to adversely affect the spiritual significance of natural features important to Native American groups." (84 EA at 47) The Visual Quality Objectives of Retention and Partial Retention would not be met by the introduction of industrial structures and are particularly disturbing when considering Native American cultural uses of the area.

In June 1999, EPA addressed the problems associated with the visual impacts, stating that "the fact that recreational or visual impacts are more significant to some tribal culture does not necessarily relegate these concerns to a separate category of 'cultural impacts.'" EPA emphasized that whether or not visual or recreational impacts are unacceptable must be considered "in a manner which is inclusive of the viewpoints and cultures of all communities residing in or using the Medicine Lake area." For this reason, the visual and noise impacts should be assessed for Native Americans sites in the same way as for recreation or park sites, acknowledging that "developments that could not be screened visually or muffled so as not to be heard in a distracting manner...could mean permanent closure and loss of use." (84 EA at 35-36)

The Findings of Fact and Statement of Overriding Considerations for the Telephone Flat Geothermal Development Project stated that the "integrity of the area is violated when power plants, roads, and transmission lines are built. These are visual elements out of character with the cultural landscape". The impact is "considered "significant," and "There is no way to mitigate the effects of increased development on the traditional cultural property as a whole." Impact 3.6.3.3-1 page 39. Additionally, it was stated at Impact 3.6.3.3-2 that "The Project will affect vision quest sites at locations 17, 20, and 21 because it will alter the visual (and probably aural) setting required for traditional activities at those sites. This may render them unsuitable or unusable for their religious uses. It may have a similar effect on other vision quest sites at locations 11, 19, and 22." This impact was also considered to be significant and "...there is no way to mitigate the visual impact even with revegetation activities because the power plant facilities and cooling tower condensate plumes would remain visible under certain meteorological conditions." [see page 39-40]

Additionally, the Findings of Fact and Statement of Overriding Considerations for the Project determined that Native American Values are significantly impacted by the transmission line corridor and cannot be mitigated to less than significant. "The impact of construction is considered significant and unavoidable because the Project would introduce visual and audible elements that would alter the setting in the vicinity of the proposed Project." See Impact 3.6.3.6.2-4 at page 79. "The view of the Project facilities would be considered a significant adverse effect because the proposed transmission line would represent an introduction of elements that are out of character with the

property, or alter its setting." And determined that after mitigation measures "...the visual effects would remain significant and unavoidable in the context of Native American values." See Impact 3.6.3.6.2-8 at page 81. This further underlines the discriminatory character of the approval of the ATC in spite of the Air District's knowledge that severe impairment of Native American cultural values would result from significantly adverse visual impacts.

## Noise Pollution

The Medicine Lake Highlands is an area valued for its purity and silence. Natural sounds have cultural and religious significance and meaning, whereas industrial clanks and drones of machinery are experienced as an intrusion. The Air District measured the impacts against a noise standard that is detrimental to Native American cultural uses, which indicates discrimination. In addition, the Air District defied Siskiyou County's own determination that: "Noise is a subjective evaluation which can be broadly defined as unwanted and unhealthy sound. Loudness is usually regarded as the prime ingredient; however, there are other characteristics which contribute to the noise and its effects. These include frequency of pitch, duration...and the familiarity of certain sounds [.]". See Siskiyou County, General Plan, Defining the Noise Problem.

The EIR measured noise levels against a standard that is not protective of Native American practices. The Telephone Flat EIR uses Siskiyou County's Noise Element (1978) for actively utilized areas such as playgrounds, neighborhood parks, and residential uses. A more appropriate standard for the Native American cultural sites would have been to use the Noise Element for Quiet and Contemplative areas, which is significantly lower. The Forest Service realized this flaw and did a second noise study at specific sites that was not included in the Air District's Update Assessment. However, even this study failed to evaluate overall noise levels at the Traditional Cultural District and the Medicine Lake Highlands as a whole, where Native Americans conduct their cultural and religious practices. Furthermore, the study only measures noise impacts at a handful of widely used receptor points. The evaluation does not reflect the fact that Native American vision quests and other practices may require access to areas that are closer to the project facilities than the tested receptor points. The levels of noise may even render some sites unusable.

Nonetheless, the Telephone Flat Findings of Facts and Statement Overriding Considerations did state that "Noise impacts *might* be mitigable if practitioners were willing to advise the USFS or CEGC when a visit to a vision quest site is planned so that construction, drilling, or well testing operations could be modified," and determined that the impact was still "Significant" after the proposed mitigation. See Mitigation Measure 3.6.3.3-2 at page 40. The transmission line corridor also "...would generate noise during transmission line construction, transmission line maintenance during operations, and during decommissioning while removing transmission line facilities. The noise effects of the Project would be significant and adverse if they are audible at

the site and interfere with religious or ceremonial practices. The following measures would reduce the noise levels, but they are expected to remain significant and unavoidable after mitigation.” See Impact 3.6.3.6.2-6 at page 80 of the Findings of Fact for the Project.

Had the full noise effects been disclosed, the impacts to Native American cultural uses would be even greater. In Native American traditional people’s own words:

A big part of utilizing these cultural resources is having no contact with other human beings or anything modern. The plumes, smells, lights (even downward facing lights), structures, noise, etc. cannot be reduced to a

level where they will not interfere with the heightened state of awareness that comes out of this state of [spiritual fasting] and deprivation. Declarations of Martinez and Buckskin (February 2, 1999).

The Air District’s discriminatory action is to issue the ATC permit despite the determination of adverse impacts.

## **Air Pollution**

Clean air is an essential quality of the Medicine Lake Highlands and for the area’s Native American cultural significance. Its purity is essential for maintaining the pristine water quality of Medicine Lake. Indeed, mean visibility is 150 kilometers or greater, with the maximum mean visual range of 225 kilometers. See Fourmile Hill EIR at 3-198.

During development of the wellfield [which would require an additional two to *three years after* completing previously approved exploration drilling], and during plant operation, Project facilities would emit large quantities of air pollutants such as oxides of nitrogen (NOx), particulate matter (PM 10), and hydrogen sulfide (H<sub>2</sub>S). The concentration of the hydrogen sulfide as well as mercury, arsenic, and other heavy metals in the geothermal fluids are only an estimation since the existing wells have not been tested in over 12 years. However, in the ATC, the Air District has failed to require the most stringent control measures for these toxic emissions.

Calpine estimated nearly 18 tons per year of hydrogen sulfide emissions during normal operations of the Telephone Flat power plant in their application to the Air District. As described previously, the Project would result in visibility impacts caused by hydrogen sulfide plumes and acid rain fallout to the pure unpolluted waters, vegetation, and wildlife in the Medicine Lake Highlands that are used by Native Americans for food and ceremony.



According to the environmental documents for the Development Project, one drill rig operating with 4 engines would produce approximately 1676 pounds per hour.<sup>9</sup> The Air District has allowed Calpine to operate *simultaneously* two drill rigs in the Telephone Flat project area and thus the maximum NO<sub>x</sub> emissions from these two drill rigs [with all 4 engines operating simultaneously on each drill rig] would result in over 3300 pounds *per hour* of NO<sub>x</sub>. However, the Air District considered the impact as 'less than significant' despite the current pristine airshed, the close proximity to two Class I airsheds in the adjacent Lava Beds National Monument, and the importance of pure air to Native American cultural values and practices.<sup>10</sup>

Even if air emissions were to remain just below the California Ambient Air Quality Standard [CAAQS], the resulting impact on the Highlands would be severe. The Highlands region is a remote and undeveloped area free from industrial pollution. Thus, any emission of air pollutants, including those not regulated by the CAAQS, would destroy the pristine air quality of the Highlands. Furthermore, the Interim Guidelines ("Guidelines") issued by the EPA Office of Civil Rights state that "merely demonstrating that the permit complies with applicable environmental regulation will not ordinarily be considered a substantial legitimate justification" for disparate adverse impacts on the environment. Guidelines at 12.

U.S. EPA and the ARB have adopted air quality standards to protect the public and the environment from adverse effects of air pollution. PM<sub>10</sub> (Particulate Matter) is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, or mists. The size allows them to enter the air sacs deep in the lungs where they could result in adverse health effects. PM<sub>10</sub> also causes visibility reduction.

The 24-hour standards protect the public from the effects of *short-term exposure* to ambient PM<sub>10</sub> concentrations. The State 24-hour standard is exceeded when the 24-hour PM<sub>10</sub> concentration is greater than or equal to 50.5 ug/m<sup>3</sup>. Siskiyou County is classified as "non-attainment" for the California Ambient Air Quality Standards.

The Air District found that there are no feasible mitigation measures or alternatives that would reduce the short-term impacts to air quality during construction of the 13-mile transmission line to less than significant, as the state 24-hour PM<sub>10</sub> standard could be exceeded. The Air District ruled this to be *significant and unavoidable*.

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<sup>9</sup> The technical appendices at Appendix G, Table for calculating NO<sub>x</sub> emissions. The EIR calculated NO<sub>x</sub> drill rig emissions using 2.20 g/s which translates as 419 pounds/day for 1200 rpm at 100% load. The FEIR states that this 419 pounds is for only one of 4 engines that would run one drill rig and that all engines could operate simultaneously. See EIR at page 3.4-18. So using these numbers, 4 engines X 419 pounds/hour = 1676 pounds/hour of NO<sub>x</sub>.

<sup>10</sup> Impact 3.4.3.3.1-3 stated that the Ambient Air Quality Standard for combustion of diesel fuel in the drilling rig engines would produce substantial quantities of NO<sub>2</sub>. The predicted worse-case scenario would only be "*slightly below the one-hour CAAQS*." See Findings of Fact and Statement of Overriding Considerations at page 31, emphasis added.





Last year Calpine submitted a multi-phased proposal to the Department of Energy for experimental Enhanced Geothermal System testing at the Medicine Lake Highlands and submitted an application to the California Energy Commission for funding a deep exploration well within the Mount Hoffman Roadless Area at well pad 18-32 as the first phase of developing a power plant there.

The Department of Energy (DOE) has also indicated its desire to expand geothermal power in the Northwest through its GeoPowering the West Initiative. This calls for an expanding geothermal power base that would supply 10% of the state's energy by the year 2020 and includes tapping the energy at the Medicine Lake Highlands (also known as the Glass Mountain Known Geothermal Resource Area). California also passed the Renewable Portfolio Standard (RPS) that requires the State to produce 20% of its power from renewable resources by 2017 of which the California Energy Commission has outlined in a draft to the legislature that 1000 megawatts would be produced from geothermal development in Siskiyou County. However, the RPS standard nor the DOE Initiative require developing power at all costs, including the desecration of sacred lands.

In the proposed Glass Mountain power purchase agreement, the Bonneville Power Administration ("BPA") promised to purchase the power generated by the Fourmile Hill Project. BPA has the option of purchasing "an additional 1000 MW (in 20 MW increments) from possible future projects at Glass Mountain." See BPA Administrators Record of Decision (December 18, 1996) at 5 in our previous submission, EPA File No. 2R-01-R9.

Another indication that the Air District did not fully consider cumulative impacts in issuing the ATC is the Fourmile Hill EIR's statement that: "The transmission line voltage of 230kV was selected to accommodate potential future development in the Glass Mountain KGRA." (EIR at 2-76) It further goes on to say, regarding the transmission line capacity that: "... a preference that the proposed transmission line for the project be designed to accommodate not only the net electrical power output of 44.9MW from the proposed project, but also reasonably foreseeable geothermal power generation that could occur at the Glass Mountain KGRA." The proposed transmission line would have an effective capacity of 145 megawatts, although it would have a design capacity of 300 megawatts to the tie-in with the BPA Malin-Warner line." Fourmile Hill EIR at page 2-37 and 38. The 145 megawatt transmission line capacity means that at least three power plants the size of the Project, with a maximum of six power plants, could be accommodated by the proposed transmission line.

Despite this obvious evidence of future build-out of the Medicine Lake Highlands to geothermal development, the Air District permitted the 48 megawatt Telephone Flat power plant. This is clearly a discriminatory action in light of the fact that Calpine owns all the leases to develop geothermal energy in the Medicine Lake Highlands.

The Air District responded to concerns about future projects by stating that "Assessments in this regard would be speculative at this time." See Statement of Fact

and Overriding Considerations at page 95. However, the standard for determining whether cumulative impact analysis is required under NEPA is not whether projects will “necessarily” be constructed, but whether such construction is “reasonably foreseeable.” Similarly, OCR Guidelines for Title VI state: “evaluations of disparate impact should be based upon the facts and totality of the circumstances that each case presents.” Guidelines at 9.

Given (1) the original intent to develop as many as ten projects in the Glass Mountain Area, (2) the actual existence of 31 leases in the area, (3) the size of the proposed transmission line, and (4) the express statements of BPA and the Project applicant regarding future purchase options from “future projects,” approval of the Projects would set the stage for the development of several more geothermal projects in the Highlands area.

**B. The environmental impact of the Telephone Flat Project would have a disparate impact on Native Americans**

While the general population living near the Medicine Lake Highlands may also suffer from the effects of development, the destruction of the physical landscape, pure air quality, and serenity of this sacred site uniquely and disproportionately affect Native Americans. The Highlands serve as the nexus for a rich tradition of Native American spiritual, religious, and cultural practices. With the advent of the development of the Fourmile Hill Project and the potential development of future geothermal projects, all of these centuries-old traditions are at stake. The impact of development on these traditions is especially devastating when viewed in light of the history and marginalization of Native American peoples and culture.

Title VI of the Civil Rights Act of 1964 provides that: “No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” 42 U.S.C. § 2000 (d).

OCR Guidelines define discrimination as any act that can be shown to have a disparate and adverse impact on a minority community. 40 CFR § 7.35 (c). The Guidelines also state: “evaluations of disparate impact should be based upon the facts and totality of the circumstances that each case presents.” Guidelines at 9.

The “facts and totality of the circumstances” in this case show that the cumulative burden of the Project’s physical presence, noise pollution, and air pollution will have a disproportionate impact on the Native American communities of Siskiyou by destroying the sacredness of the Highlands and impeding the ability of Native American tribes to use the land for cultural and spiritual practices.

The “facts and totality of the circumstances” also indicate that the development of the Telephone Flat Project is not an isolated incident. Rather, it is the second in a series of schemes to develop the Highlands. The environmental impact of the Project has not been assessed in its proper context, which would have revealed that approval of the ATC would have far worse impacts on Native American culture than is being admitted.

## CONCLUSION

The ATC approval was made despite determinations that the Project would have significant adverse impacts on Native American traditional cultural values and uses in the Medicine Lake Highlands.

Furthermore the Air District displayed its discriminatory character by issuing the ATC without requiring a condition for the operator to describe all planned future development. Describing future projects is a practice followed by other Air Districts, for example the Lake County Air Pollution Control District. As stated above, there is every indication that the Medicine Lake Highlands are targeted for future development beyond what has been permitted. A permit issued for a capacity of 200 MW, 300MW or more would require a Prevention of Significant Deterioration, New Source Review, as well as Major Source evaluation under statutes designed to prevent air pollution. None of these evaluations have been performed for the ATC issued for the Telephone Flat 48 MW geothermal facility. By segregating the permitting aspects of the Project, the Air District has piecemealed permits that do not require the most stringent controls, as well as piecemealing the reasonably foreseeable impacts on Native Americans.

All aspects of the Project that affect Native American cultural values – air, water, noise, vegetation, wildlife, habitat fragmentation, visual quality... – are minimized by this piecemeal approach to permitting, which does not begin to disclose the full devastation of changing a Sacred natural setting to an industrial one. For this reason, we are insisting on a supplemental EIR fully disclosing the cumulative impacts of all issued leases and setting aside the leases until environmental review has evaluated disclosed the impacts of full development.

At a minimum, we insist that a supplemental EIR or recirculation of the EIR should be done in response to the Keeper's July 1999 determination of eligibility of the entire caldera [which includes the Telephone Flat Project] as a Traditional Cultural District, which would address significant post EIR impacts, including, but not limited to the additional visual and noise impacts assessments in light of the Keeper's determination, changes in the air impact analysis, cumulative impacts, and additional information regarding the proposed Enhanced Geothermal Systems testing. In certifying the EIR, the Air District incorrectly determined that: "The recent designation of the Medicine Lake Highlands as a Traditional Cultural Place ("TCP"), the creation of the Memorandum of Agreement for the Fourmile Hill Geothermal Project, and implementation of the Historic Properties Management Program for the Medicine Lake Highlands do not provide significant new information that was not evaluated in the EIR. The EIR identifies the cultural significance of the Project area and evaluates *all* potential impacts of the Project on cultural resources." See Statement of Decision 03-01

As an air quality control authority funded by the EPA, the Air District is prohibited by Title VI and its implementing regulations from approving any project that will have the intent and/or effect of discriminating against communities of color. Nevertheless, by issuing the Authority to Construct permit for the Project, the Air District gave its

approval to a project that will significantly and disproportionately impede the ability of Native American tribes to enjoy and use the pristine and sacred Highlands.

OCR Guidelines hold the Air District accountable for approving projects precisely like this one. "Even where a recipient's authority to regulate is unclear concerning cumulative burden or discriminatory permitting pattern scenarios, OCR will nonetheless consider impacts measured in these terms because Title VI is a federal cross-cutting statute that imposes independent, nondiscrimination requirements on recipients of federal funds." Guidelines at 9.

Moreover, Guidelines also state that recipients of federal funds are prohibited from having a role in choosing a project site in a discriminatory manner. One step in choosing a project site is choosing whether a location is suited for a particular project. By deciding that the Highlands are a suitable area for the project, the Air District has played an active role in the siting decision, and has therefore violated a "specific prohibition" of the Title VI regulations.

For all these reasons, the Native Coalition asks EPA to conduct a thorough investigation of the Air District's approval and permitting of the Project, and to take the most stringent measures available under Title VI of the Civil Rights Act.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Michelle Berditshevsky", with a long, sweeping horizontal line extending to the right.

Michelle Berditshevsky, Executive Secretary  
Native Coalition for Medicine Lake Highlands Defense

3 Enclosures